Interfaces, social dimensions

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An important question for enactive interfaces is the question of their social acceptance and of their social dimension.

To approach this question, we first propose to distinguish the modes in which technical artefacts exist. First of all, we can distinguish two modes: in-hand and put-down [Heidegger, 1996]. Put-down corresponds to the mode in which the artefact is the object of the explicit attention as an assembly of the matter with certain proprieties (the specifically scientific mode of relation to the object). One can think on the difference between designing and riding the bicycle. The in-hand mode is the mode in which the user is engaged in the activity, and in which, under normal conditions, the artefact is transparent, one feels it like the extension of the body, not like the object of the physics [→ Technical artefacts, modes of] [Merleau-Ponty, 1945].

The fact that technical artefacts exist in the mode of being put down has an important consequence: the persons who design and make technical artefacts are, generally, not the same as those who use them. Thus, technological development goes together with a division of labour and, correlatively, the development of mechanisms of social synthesis (exchange, market economies), which organize the integration of technical systems as functional wholes.

Traditionally, social and political science (with the exception of Marx) has not paid much attention to technology, which is usually considered as a black box, as intrinsically neutral means to pre-defined ends. The approach outlined here leads to a new perspective in which technology occupies a central position. The work of engineers has immense social significance because, in fine, the choices of technological devices and systems fashion the human condition itself, by constructing the world that human beings live in, and particularly by manufacturing interfaces that change the means of action, and influence sensations. Thus, in our society, any really serious political debate necessarily involves debate on technological choices.

Since the technology is not something neutral, it affects the quality of interaction between the human and the world. This introduces the debate about the usage of technology. Is the knowledge of the usage situated in the user? Does the quality of the interaction depend only on this user's knowledge? How to make an artefact responding to the enactive knowledge of the user?

On our point of view, we need to understand how the enaction takes place between the two terms, the user and the artefact. In other words, in the case of human being, it seems impossible to talk about a standalone user on whose knowledge depends the use of the artefact, and the ability to make it enactive. Since the enactive knowledge (if one considers enactive as the sensori-motor knowledge) is not something independent on the practice of artefacts, it seems difficult to say that it is situated in the user. If we agree that the artefact modifies the established sensory-motor contingencies, then the enactive knowledge depends on the artefacts.

Now, the enactive is a quality that does relate to the individual, and that it is the human who enacts: the experience of enaction (i.e. experience of an enacted world as a world of possibilities) is always for a human (who is always technically equipped, even if he/she doesn't actually use any interface), and the artefact alone does not enact anything. But if the capacity to enact lies in the user, the human's experience is always depending on the artefacts, and the artefact does change the quality of enaction.

So already for a single user the enactive knowledge is something situated between the

user and the artefact, but what about the social exposure? The couple artefact / sensory-motor contingencies is something that does evolve on the scale of the society. We think that the problem of usage is something intrinsically social, and that's why it is difficult to report this problem to enactive knowledge of a single user.

What is enactive, it's not the interface itself, neither the usage alone, it's the combination of them. If one designs a very enactive interface, but there is no social acceptance or implication, in the best case the usage will be restricted to a narrow community. But the contrary is also true: if the interface is not appropriated, there'll be no enaction (in the following sense: no good quality of relation between the human and the world) even if there is a wide social exposure. So, we need to distinguish two sorts of enactive interfaces: in a broad sense, every artefact is enactive because it does modify the sensory-motor contingencies, and bring forth a particular lived experience, even if the artefact is really constraining; in a strong sense, the criteria for the interface to be enactive (good quality of interaction, transparency, etc.) are actually still to find.

But this is probably not enough. If we continue to think, - and that was the mainstream of industrial engineers -, that it is sufficient to design an interface that seems good to designers, we would be probably wrong. Many works on the anthropology of usage and on involving the end-users in the process of design seem to go in this direction.

Moreover, what one accepts as a quality of interaction, is not something independent on technology itself, more precisely on the socially accepted aspect of technology or, let's say, its historical aspect (it's not sure that the mobile phones with built-in cameras, in their actual state, are really useful and enactive interfaces, they are however widely socially accepted as something having a quality of interaction). In other words, the artefacts are not only responding to functional criteria, they are also, as Leroi-Gourhan [Leroi-Gourhan, 1993] for example has pointed out, a support of figurative aesthetics, and this may be to the detriment of the pure functionality. This could help us to understand in which way the acceptance of the artefacts is related to sensory-motor knowledge: this knowledge is always socially and technically transmitted and determined (however, it's important to underline that in any case we are not talking about a technological determinism: the question is how the social structures arrange with the technology, and not what technology imposes by itself.) The core question is that it is difficult to know which interfaces will have the social implications.

Would the artefact have or not the social exposure is not something lying in the technology if one considers the technology as the pure functionality of the artefact; but it is something lying in the technology if one considers the technology also as something intrinsically socially constructed, and also if one considers the social structures (for example the exposure of the artefact related to the socially accepted criteria of aesthetics) as something technically transmitted.

References

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